ABSTRACT

A component operating with bulk acoustic waves has two Bulk Acoustic Wave (BAW) resonators that are stacked and are acoustically coupled to one another, with a first resonator being connected to an asymmetric port, and a second resonator being connected to a symmetrical port. The acoustic coupling is provided by a partially permeable coupling layer system, which has an alternating sequence of at least two $\lambda/4$ mirror layers with different acoustic impedance. The coupling layer system furthermore has a compensation layer, which has an approximate thickness of $\lambda/8$. The compensation layer according to the invention makes it possible to match any discrepancy in the phase difference (which is caused by reflections on the mirror layers) from the predetermined 180° between the connections of the symmetrical port to approximately 180°.